ABSTRACT OF THE DISCLOSURE

Methods for detecting pain-relevant substances using PIM-1-kinase or PIM-3-kinase are provided. Methods of using such substances, as well as antibodies and antisense nucleotides against PIM-1-kinase or PIM-3-kinase, for instance, in pharmaceutical compositions, diagnostic agents, and in pain therapy are also provided. Certain nucleotide sequences, proteins, and part proteins are also provided.